

Sharing Data in OMEMO

Introduction

Groups are used in OMEMO to enable sharing of data between users. Groups are created by the OMEMO system administrator and usually have one or more group owners. Group owners and administrators can add or remove members.

There are four levels of group permissions allowing members different degrees of interaction with the data owned by other members in the group. In all groups, you retain ownership of your own data, and there are no limitations on the operations and actions you can perform on your own data. You can be in many groups, each with different permissions.

As group permissions are set at a server level, they apply to OMEMO.insight, OMEMO.web or any other application or script being used to access the data. Data can only be in one group, but can be moved between groups.

User roles

There are three levels of role in any group:

- Member**
- the level most users will be at
 - can always see and interact fully with their own data in any type of group
 - how much they can see and interact with data belonging to other group members depends on the type of the group.
- Owner**
- typically used by laboratory or research group leaders
 - groups can have more than one owner
 - can manage group membership
 - can increase the permissions level on a group
 - can view, annotate, edit and delete data belonging to other members in the group (except annotate in Private groups)
 - other interactions with data belonging to other group members depends on group type.
- Admin**
- this role is typically reserved for the OMEMO server administrator
 - practically speaking, Administrators can do anything they like to any user's data, in any group (except annotate in Private groups).

Group types

There are four types of group in OMEMO: Private, Read-Only, Read-Annotate and Read-Write.

The main points can be summarised as:

- you can be in many groups, each with different permissions
- you always retain ownership of your own data
- your rendering settings cannot be overwritten by any other user
- only administrators can move your data between groups
- only you, a group owner, or an Administrator can delete your data **except** in a Read-Write group.

The following sections summarise how other members in each of the group types can interact with your data.

Private Group - your data is only shared with the Group Owner(s) and Administrators.

Action on Other Users Data	Private Group		
	Member	Owner	Admin
View data, draw ROIs	X	✓	✓
Annotate data, save ROIs and rendering settings	X	X	X
Remove annotations and delete ROIs	X	✓	✓
Edit names and descriptions	X	✓	✓
Delete data	X	✓	✓
Move data between groups	X	X	✓

Read-Only Group - group members can view but not alter your data.

Action on Other Users Data	Read Only		
	Member	Owner	Admin
View data, draw ROIs	✓	✓	✓
Annotate data, save ROIs and rendering settings	X	✓	✓
Remove annotations and delete ROIs	X	✓	✓
Edit names and descriptions	X	✓	✓
Delete data	X	✓	✓
Move data between groups	X	X	✓

Read-Annotate Group - group members can add to your data but not remove anything.

Action on Other Users Data	Read-Annotate		
	Member	Owner	Admin
View data, draw ROIs	✓	✓	✓
Annotate data, save ROIs and rendering settings	✓	✓	✓
Remove annotations and delete ROIs	X	✓	✓
Edit names and descriptions	X	✓	✓
Delete data	X	✓	✓
Move data between groups	X	X	✓

Read-Write Group - group members are effectively co-owners of all the data except for moving data between groups.

Action on Other Users Data	Read-Write		
	Member	Owner	Admin
View data, draw ROIs	✓	✓	✓
Annotate data, save ROIs and rendering settings	✓	✓	✓
Remove annotations and delete ROIs	✓	✓	✓
Edit names and descriptions	✓	✓	✓
Delete data	✓	✓	✓
Move data between groups	X	X	✓

Warning: Data deleted from OMERO cannot be recovered.
Read-Write groups allow **any** member to delete **any** data in that group.

Note: Permission levels on groups can be changed by Group Owner or Admin users, therefore possibly making your data accessible to other users.

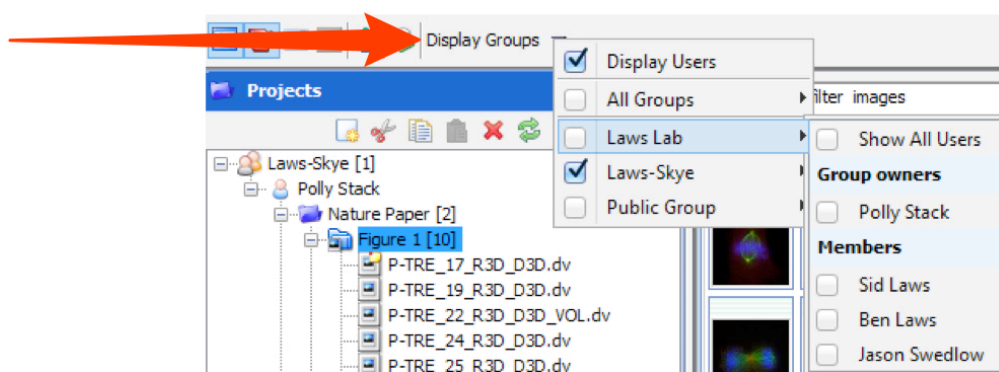
There is also a danger that some annotations such as tags, attachments and Key-Value pairs associated with data in the group might be lost if the permission levels are changed. This is more likely to occur when changing a group to a more restricted access level, e.g. from Read-annotate to Private.

Viewing data by groups

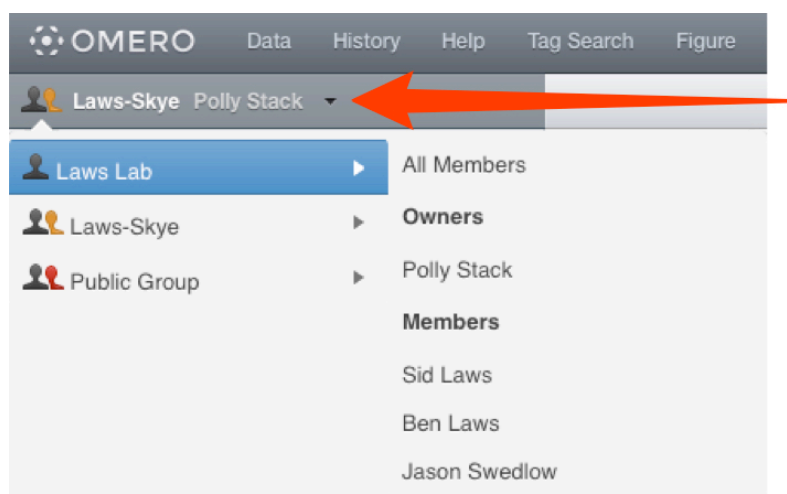
If you are a member of more than one group, your default group shows in the data tree on start-up (left hand panel).

- 1 Click on the **Display Groups** menu to select another group.
In OMERO.insight more than one group can be displayed at a time.

OMERO.insight

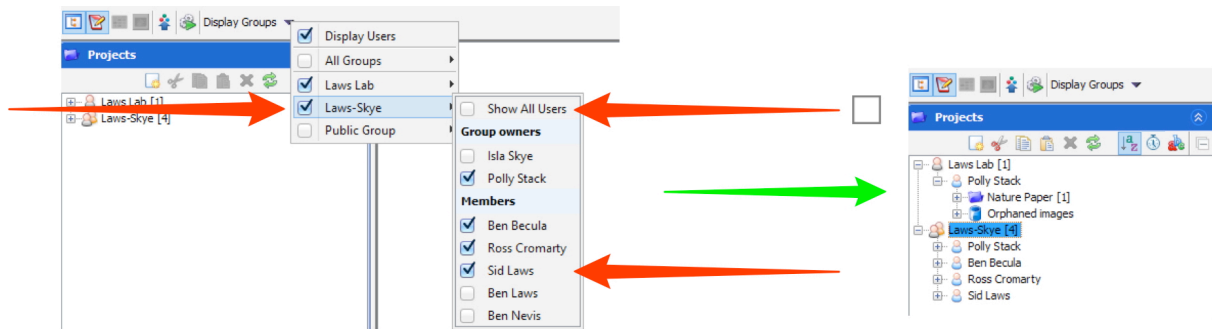


OMERO.web

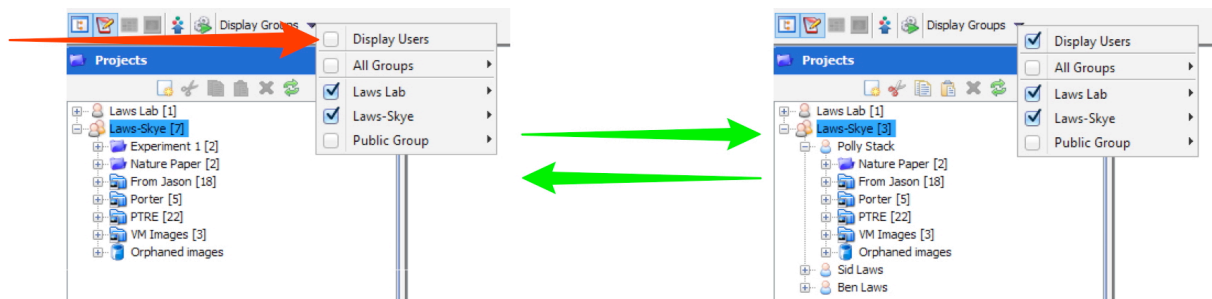


In OMERO.insight:

- 1 Select a group in the first tier of the menu to display your data in that group in the data tree.
Select **Show All Users** to display all users in the group in the data tree.
Select individual users to toggle the display of their data in the data tree.

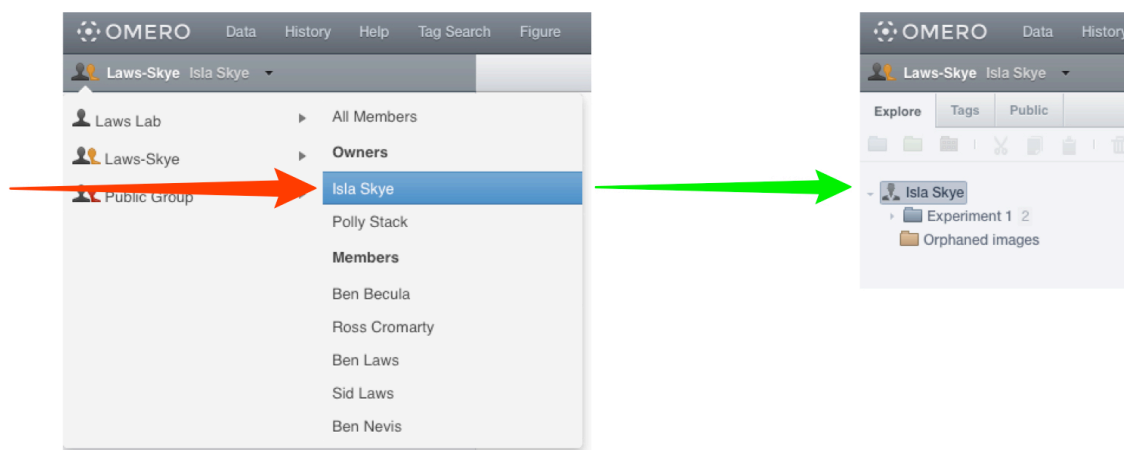


- 2 By default, data is shown according to the owner of the data.
Uncheck the **Display Users** checkbox to see all data from the group combined, irrespective of the owner.

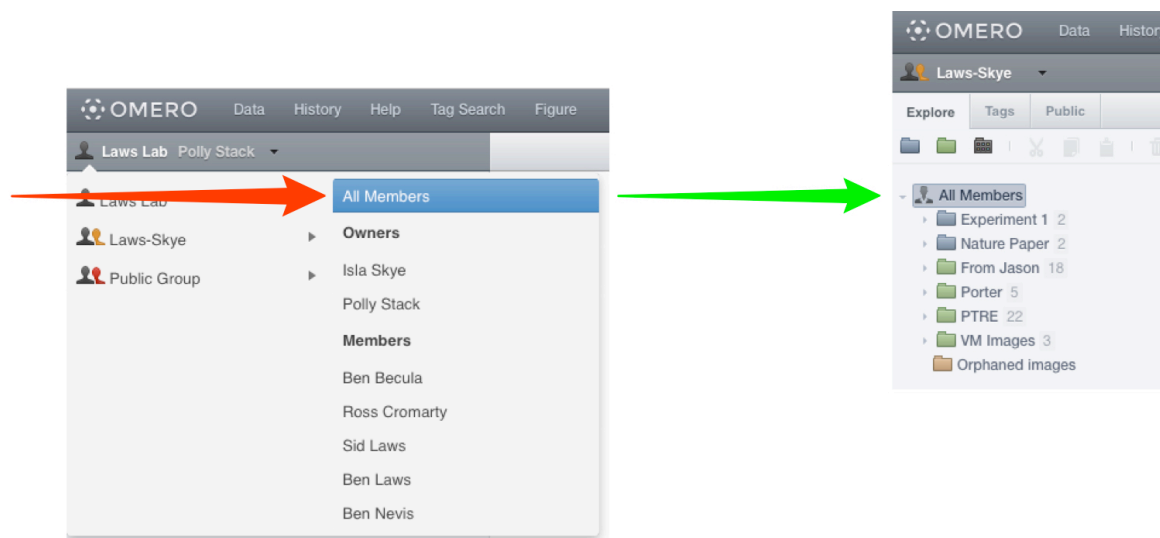


In OMERO.web:

- 1 Select an individual user to view their data in the data tree.



- 2 Select **All Members** to display all the data belonging to all users in that group.



Moving data between groups

If you are a member of more than one group, you can move data between groups.

Warning: It is likely that any tags, attachments, Key-Value pairs, comments or other annotations will not be moved to the new group and will be lost.

Right-click on a Project, Dataset or one or more Images and select **Move to Group** from the menu.

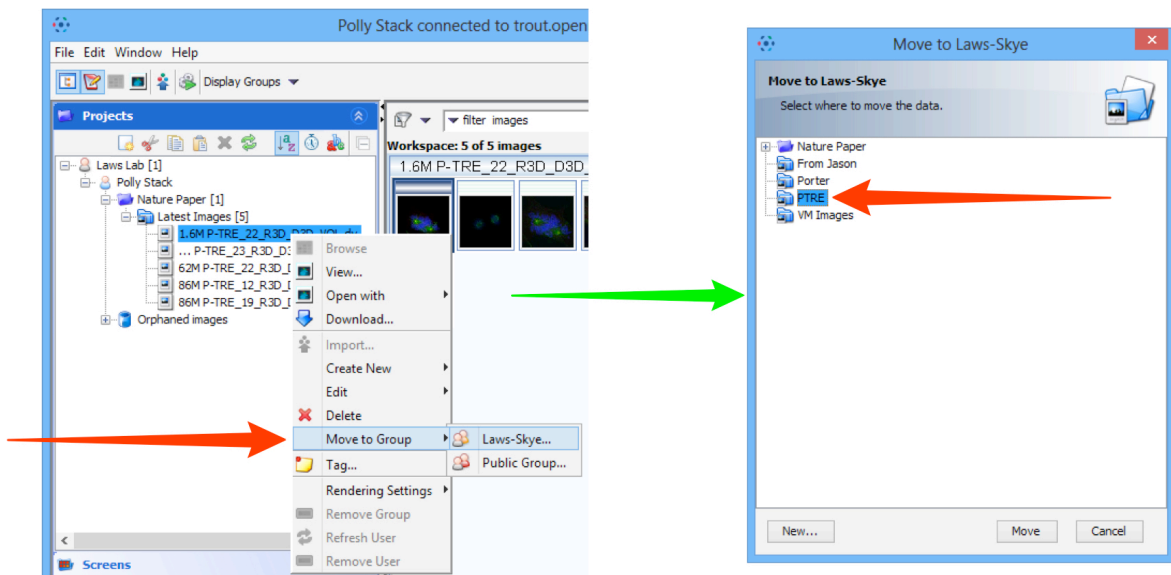
Select the destination group from the options.

Select an existing Project and/or Dataset as the destination.

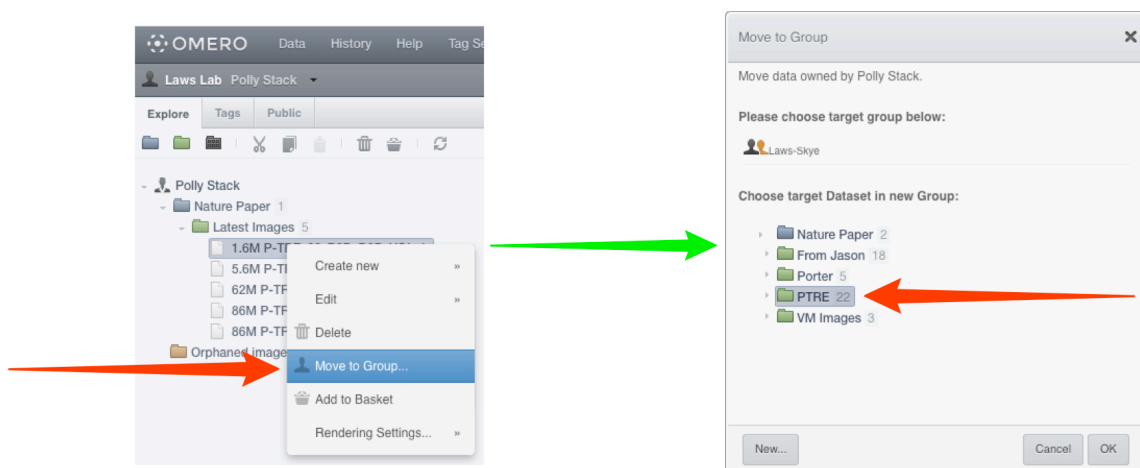
Click **OK** when done.

If no destination is selected the images will be placed in **Orphaned** in the destination group.

OMERO.insight



OMERO.web

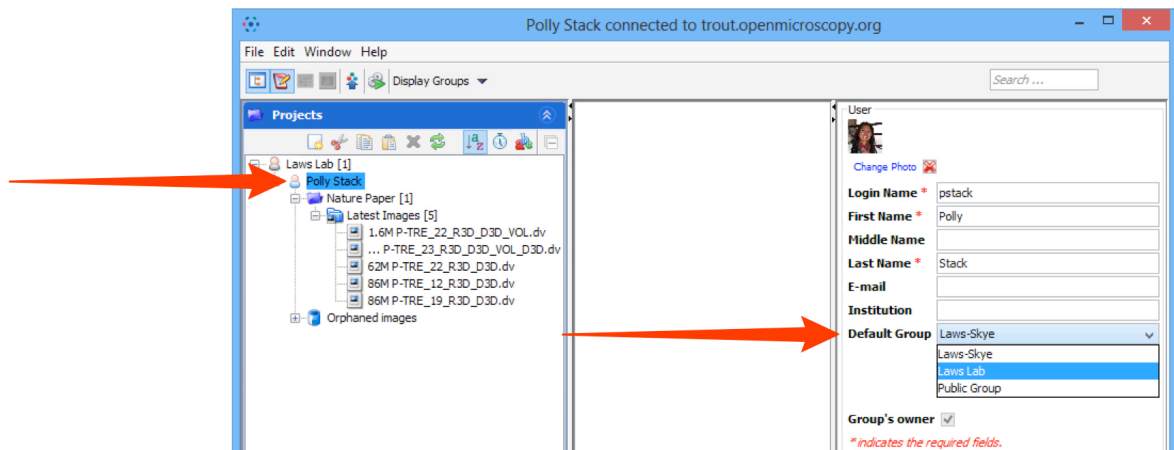


Changing your default group

OMERO.insight

To change your default group, the group that's shown when you log in, select your name in the Projects tab.

In the **User** pane on the right-hand side, select the new default group from the drop-down list.

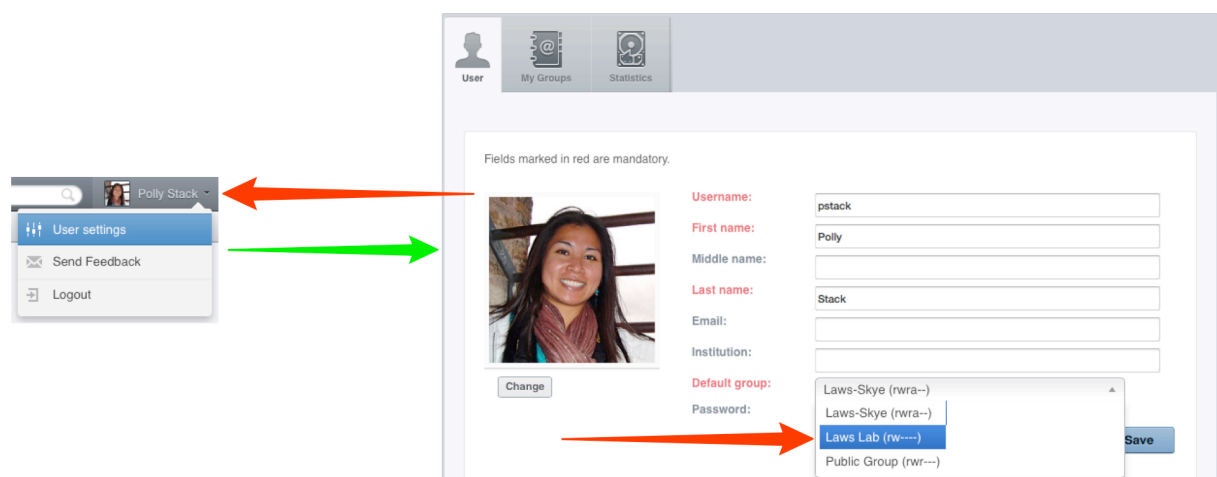


OMERO.web

To change your default group, the group that's shown when you log in, select **User settings** from the drop-down menu in the top right-hand corner.

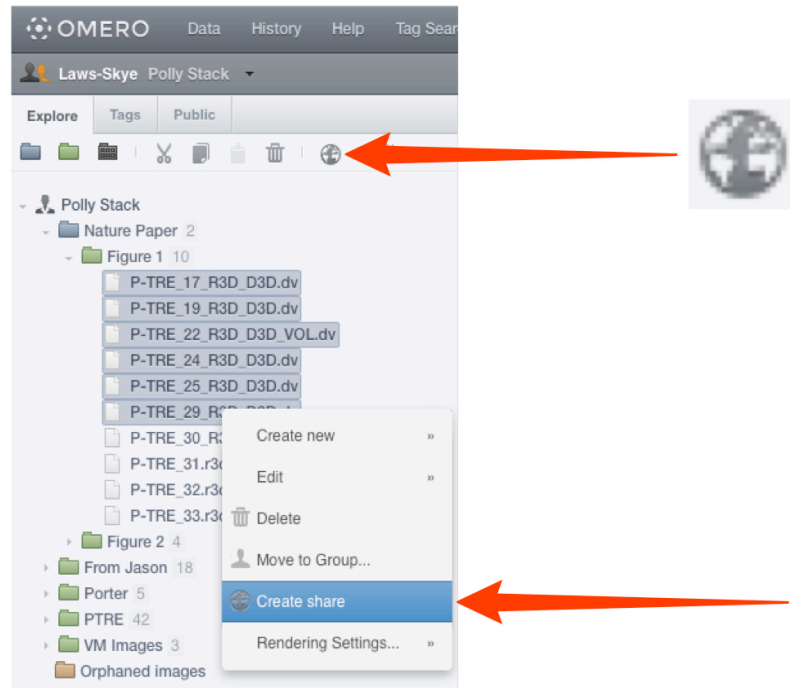
In the **User** tab, select the new default group from the drop-down list.

Click **Save** to save your new default group.

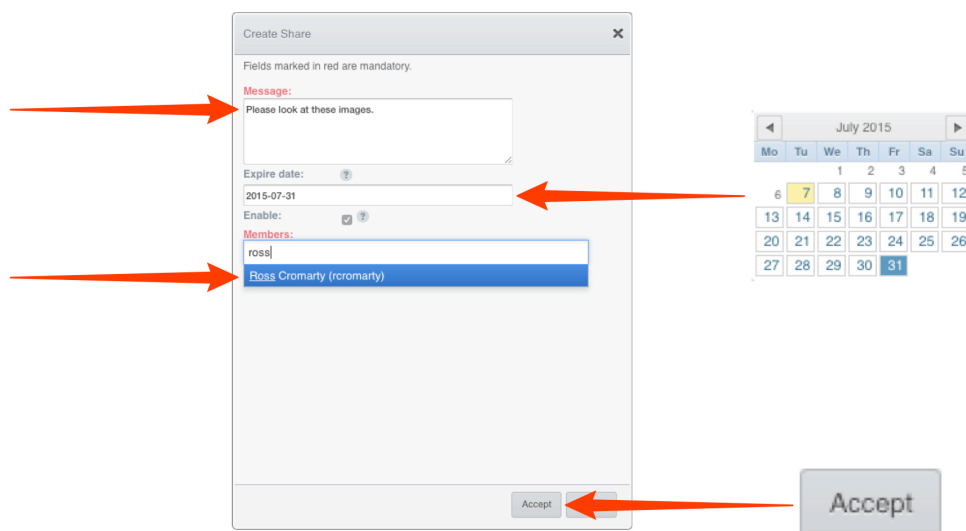


Sharing data with users you are not in a group with

- 1 In OMERO.web, you can also share data with selected other users in different groups by adding it to your **Public** list (the other users must have accounts on the same OMERO server).
Select the image(s) you wish to share.
Click on the **Globe** icon in the toolbar,
or right-click on the selected images in the data tree and select **Create share**.



- 2 Enter a message in the **Message** field.
This message will be sent automatically via email to all share members.
An expiry date can be set.
Start typing the name of a user to add to the share in the **Members** field.
Select users to add to the share from the filtered list of matching users.
Click **Accept** to complete the creation of the share.
All the members of the share who have an email address set on OMERO.server will receive email notification of the share.



3

The share will appear in the **Public** tab.

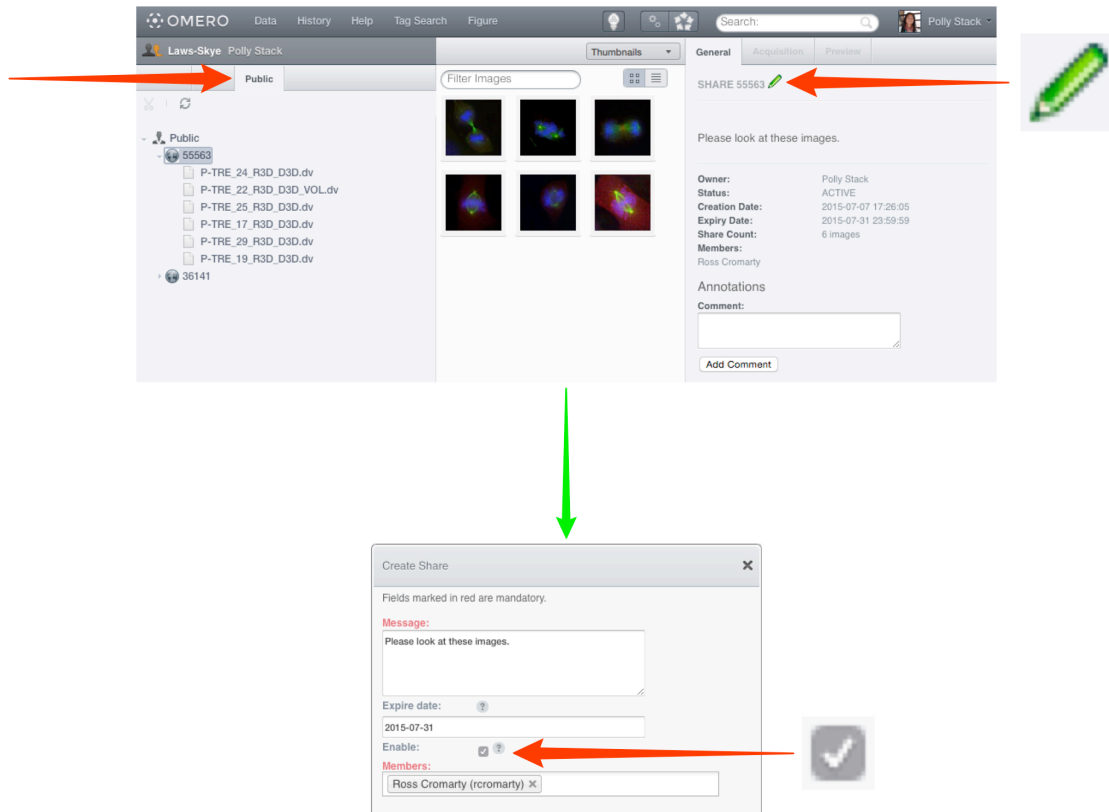
The details of the share can be viewed in the right hand pane.

Click on the green **Edit** icon edit to change the message, expiry date, or add/remove users with access to the share.

Uncheck or check the **Enable** checkbox to disable and enable the share.

If another user makes you a member of their share, it will appear in your **Public** tab.

You will be able to view the images in the share, but not edit the share itself.



Managing groups as a Group Owner

As an owner of a group, you can:

- manage the membership of that group
- import data for other members of the group
- view disk space usage for the group and members.

Adding and removing members

OMERO.insight

Right-click on the group in the **Administration** tab.

Select **Edit group membership....**

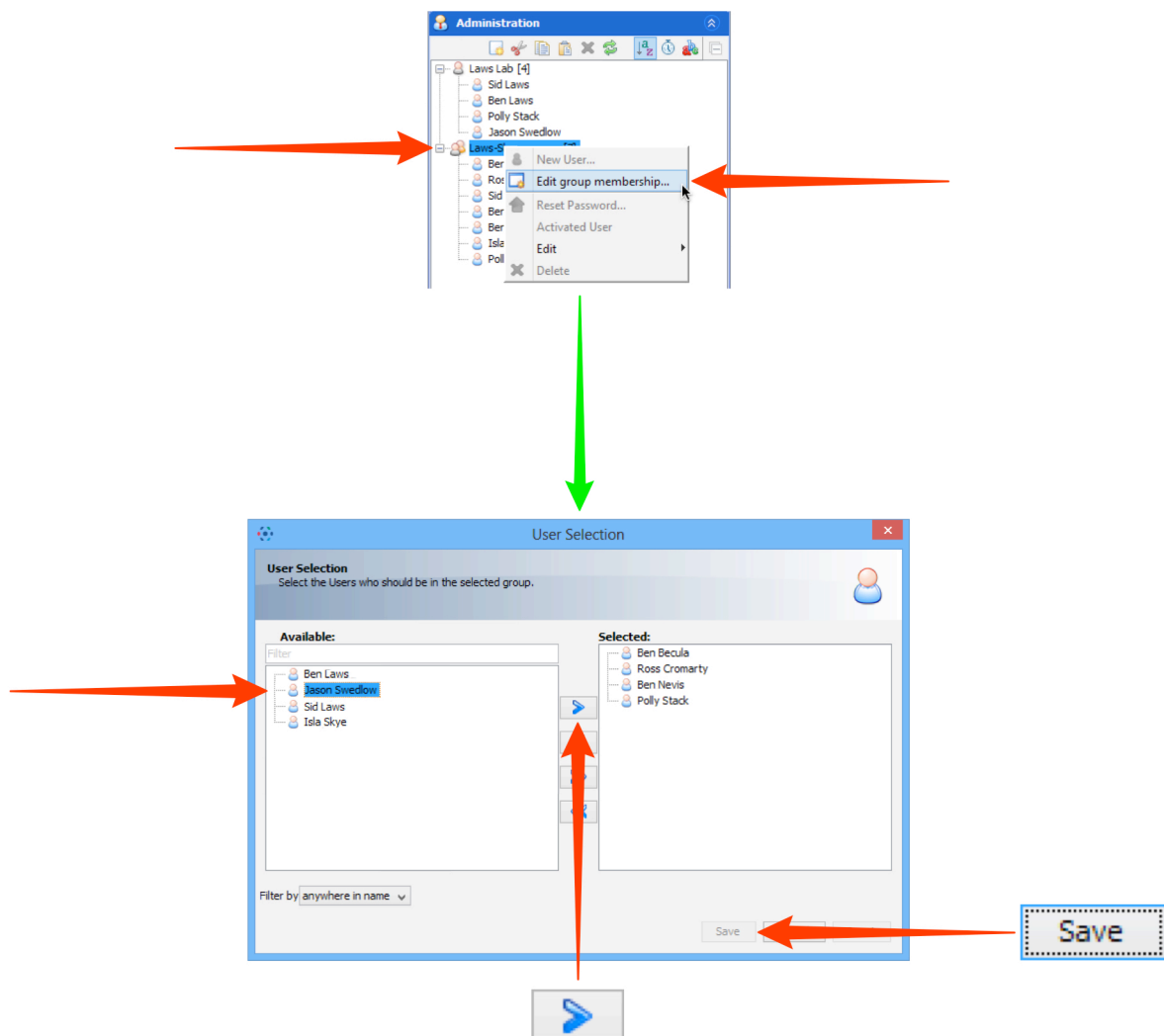
Select one or more users in the Available list box of the User Selection window.

Click the right arrow to add them to the group.

To remove a user from a group, select them in the Selected list and click the left arrow.

Click **Save** to make the changes and close the window.

Note: A user cannot be removed from the group if it is the only one they belong to.



OMERO.web

Select **User settings** from the drop-down menu in the top right-hand corner.

Click on the **My Groups** tab.

Click on the **Edit** button for the group you wish to edit.

Select one or more users in the Available list box of the User Selection window.

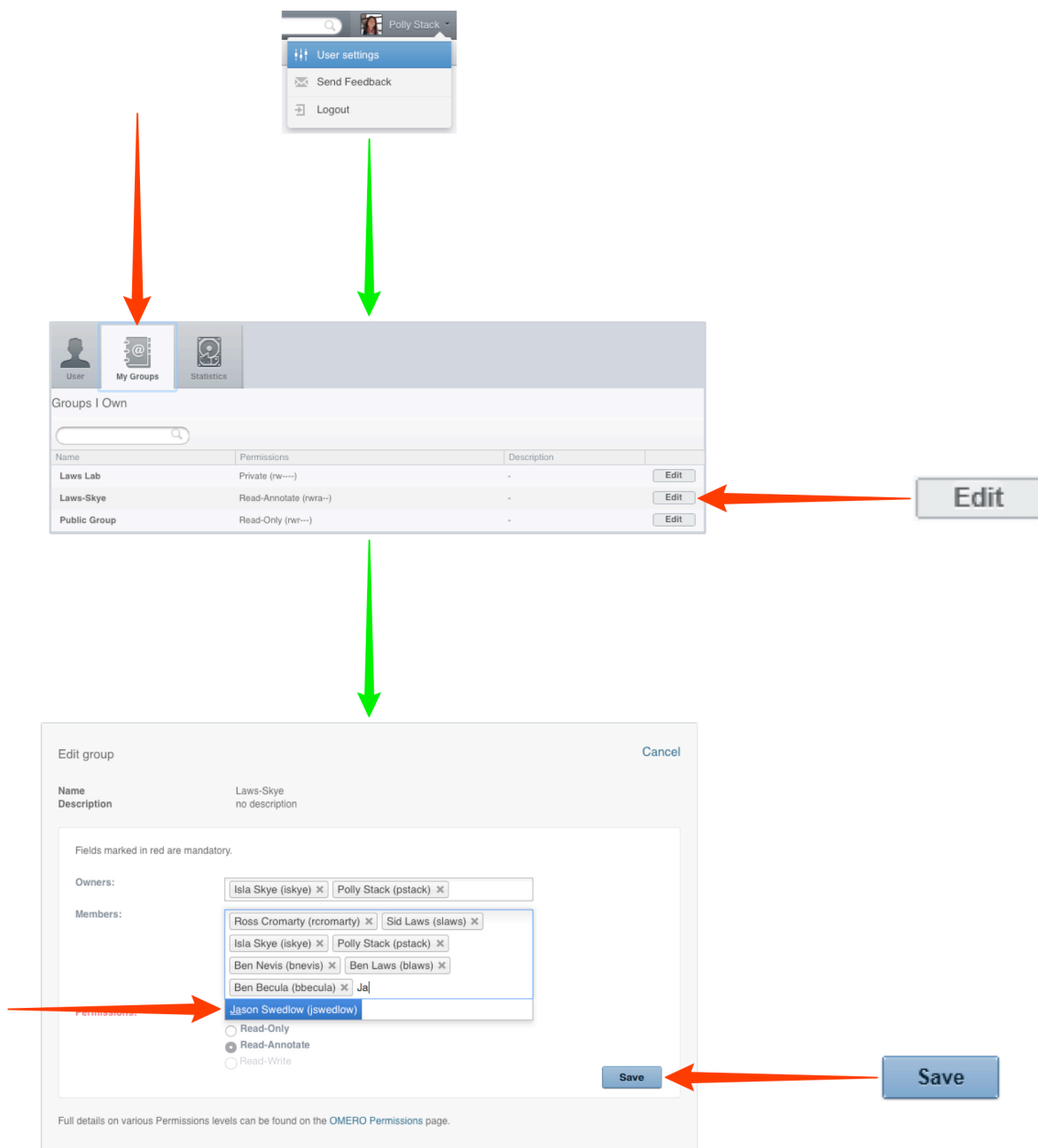
Click into the **Members** box and start typing the name of the user to add to the group.

A filtered list of users matching the letters typed will appear.

Select the user to add them to the group.

To remove a user from a group, click the **x** after their name.

Click **Save** to make the changes and close the window.



The screenshot illustrates the process of editing a group in OMERO.web. It shows the 'User settings' menu, the 'My Groups' tab, a list of groups, and the 'Edit group' dialog. The dialog includes fields for Name, Description, Owners, Members, and Permissions. The 'Members' list shows a search bar and a list of users. The 'Permissions' section has radio buttons for Read-Only, Read-Annotate, and Read-Write. The 'Save' button is highlighted.

Groups I Own

Name	Permissions	Description	Edit
Laws Lab	Private (rw----	-	Edit
Laws-Skye	Read-Annotate (rwra--)	-	Edit
Public Group	Read-Only (r-----)	-	Edit

Edit group

Name: Laws-Skye
Description: no description

Fields marked in red are mandatory.

Owners: Isla Skye (iskye) x Polly Stack (pstack) x

Members: Ross Cromarty (rcromarty) x Sid Laws (slaws) x
Isla Skye (iskye) x Polly Stack (pstack) x
Ben Nevis (bnevis) x Ben Laws (blaws) x
Ben Becula (bbecula) x Ja

Permissions: ☒ Read-Only ☐ Read-Annotate ☐ Read-Write

Full details on various Permissions levels can be found on the [OMERO Permissions](#) page.

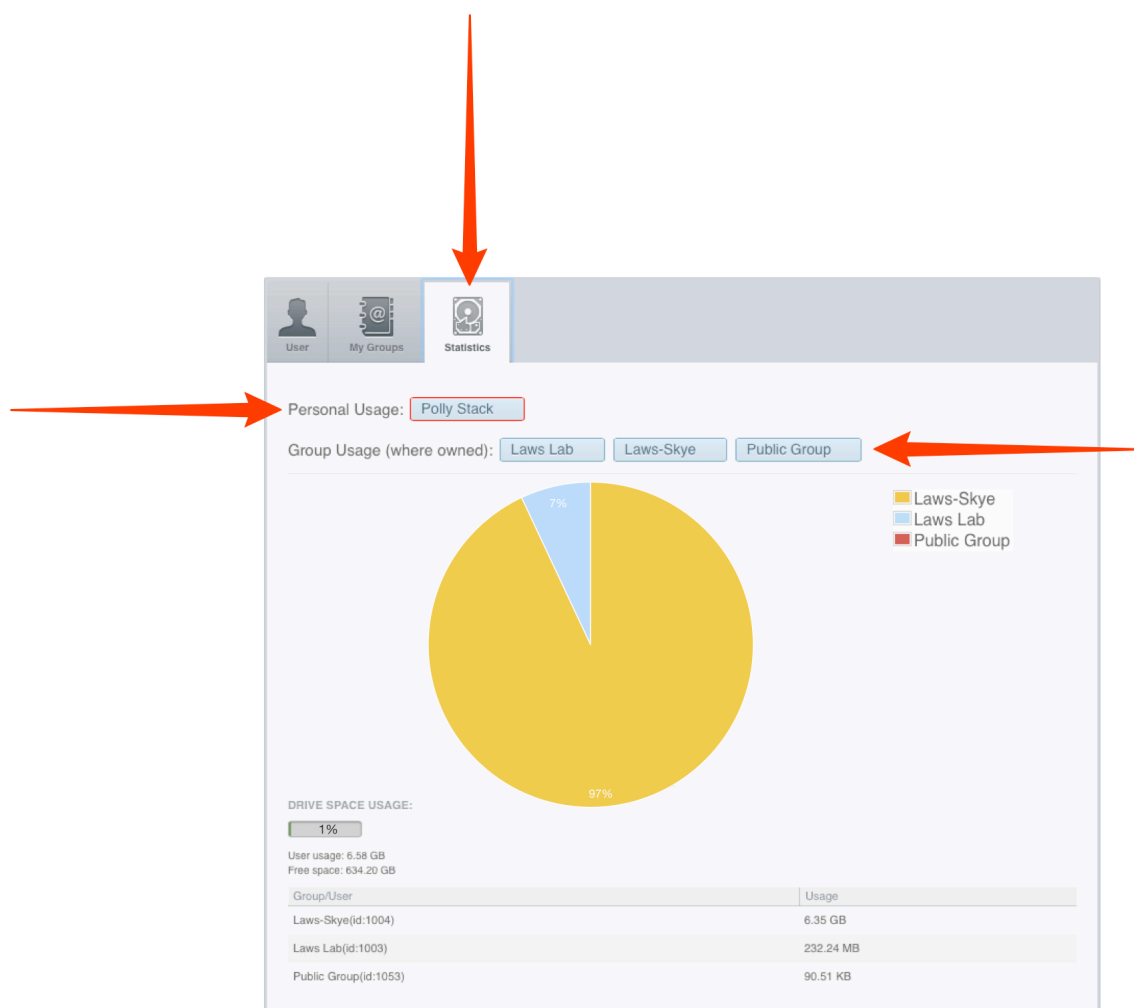
Disk space statistics

Group owners can use OMERO.web to see the disk space statistics for data usage in their groups.

Click on the **Statistics** tab in the User Settings window.

Use the buttons to select personal usage, according to group, or group usage for all users in the group.

Group usage statistics are only available to group owners.



Managing groups as an OMERO system Administrator

Note. The points described below apply only if you are an OMERO system **Administrator**.

Administrators can:

- create new users and groups
- manage the membership of all groups
- view disk usage statistics for all groups and users
- email users or groups

1

OMERO.web offers the best interface for Administrative tasks.

Click on the **Admin** button on the left in the top toolbar.

To create a new user, select the **Users** tab.

Click on **Add New User** to bring up the new user form.

Fill in the details and add the groups you wish the user to be in to the **Groups** box.

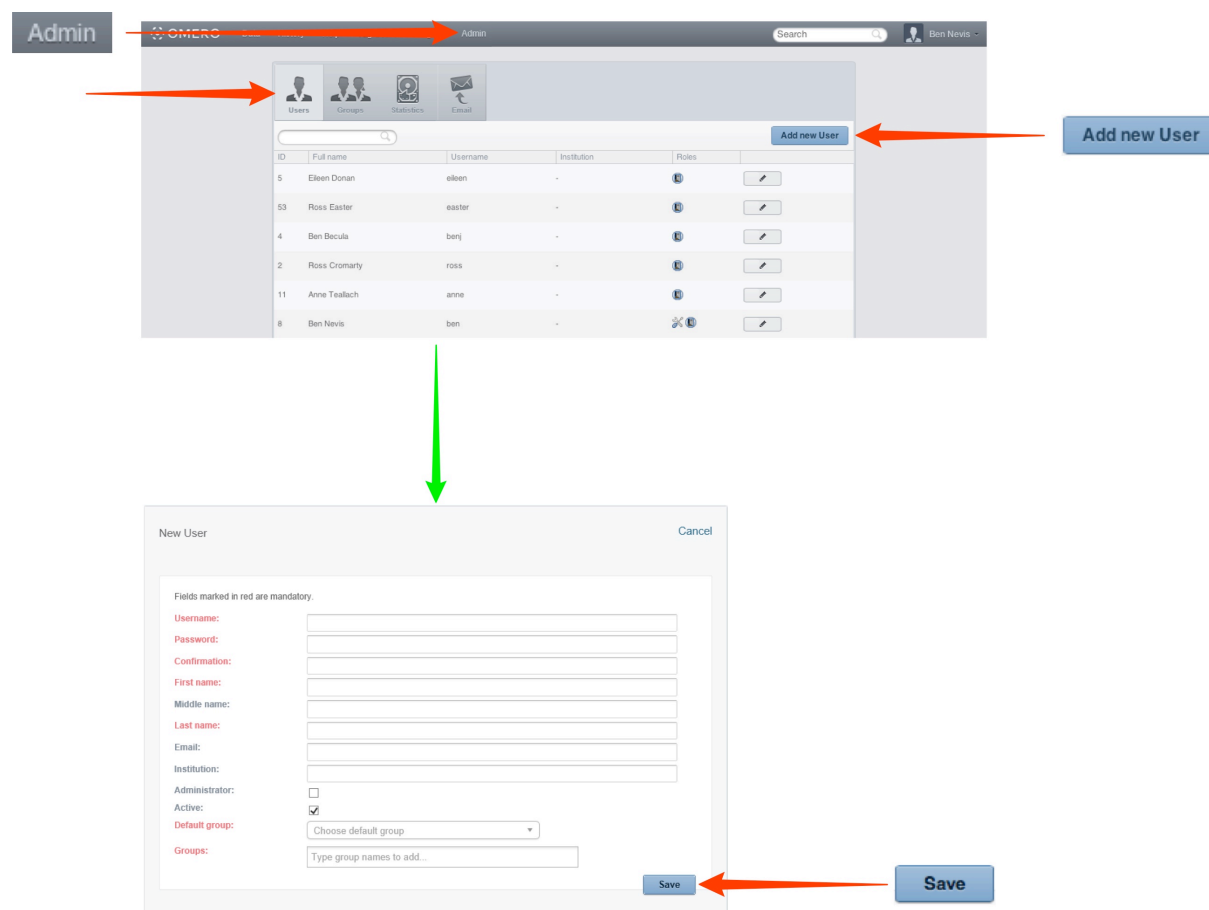
Click into the **Groups** box and start typing the name of the.

A filtered list of groups matching the letters typed will appear.

Select the group to add the user to it.

To remove a user from a group, click the **x** after the group name.

After completing click **Save**.



The screenshot illustrates the process of adding a new user in the OMERO Admin interface. The top toolbar shows the **Admin** button. The **Users** tab is selected, displaying a table of existing users. The **Add new User** button is highlighted. Below the table, the **New User** form is shown, with fields for Username, Password, Confirmation, First name, Middle name, Last name, Email, Institution, Administrator (checkbox), Active (checkbox), Default group (dropdown), and Groups (text input). The **Save** button is highlighted.

ID	Full name	Username	Institution	Roles
5	Eileen Doran	eileen	-	U
53	Ross Easter	ross	-	U
4	Ben Becula	benj	-	U
2	Ross Cromarty	ross	-	U
11	Anne Tealach	anne	-	U
8	Ben Nevis	ben	-	U

New User form fields:

- Username: []
- Password: []
- Confirmation: []
- First name: []
- Middle name: []
- Last name: []
- Email: []
- Institution: []
- Administrator: ☐
- Active: ☒
- Default group: Choose default group
- Groups: Type group names to add...

2 Click on the **Group** tab to create a new group.

Click on the **Add New Group** button.

Enter the details of the group.

Add any users to be owners to the **Owners** box.

Click into the **Owners** box and start typing the name of the user to add to the group.

A filtered list of users matching the letters typed will appear.

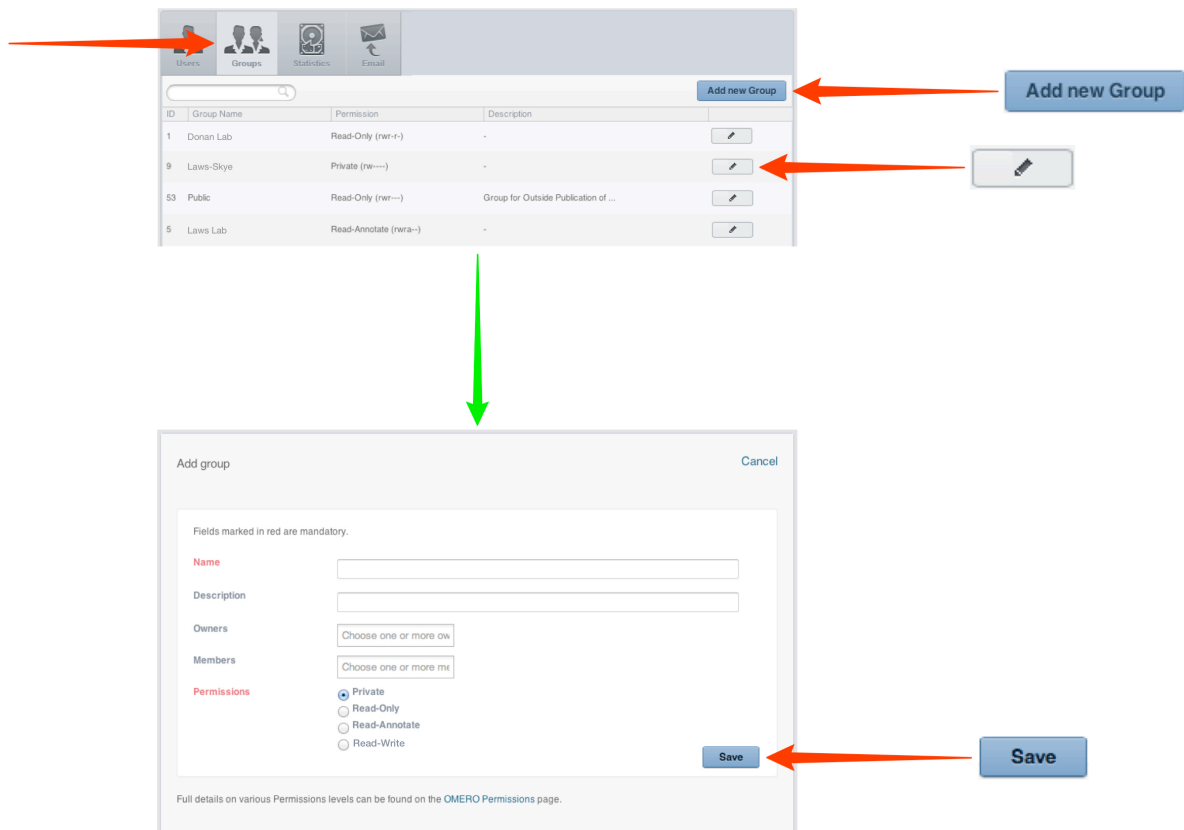
Select the user to make them an owner of the group.

To remove a user from a group, click the **x** after their name.

Add any users to be members to the **Members** box as described above.

To add a user to an existing group, click on the **Edit** icon and add users as above.

Individual members can also be added to an existing group via their user details page.



The screenshot illustrates the process of creating a new group in OMERO. It shows the 'Groups' tab in the top navigation bar, the 'Add new Group' button, and the 'Add group' dialog box. The dialog box contains fields for Name, Description, Owners, Members, and Permissions. The 'Permissions' section has radio buttons for Private, Read-Only, Read-Annotate, and Read-Write. The 'Save' button is at the bottom right of the dialog box.

ID	Group Name	Permission	Description
1	Donan Lab	Read-Only (rwr-r)	-
9	Lavis-Skye	Private (rwr-r)	-
53	Public	Read-Only (rwr-r)	Group for Outside Publication of ...
5	Lavis Lab	Read-Annotate (rwr-r)	-

Fields marked in red are mandatory.

Name

Description

Owners

Members

Permissions

☒ Private

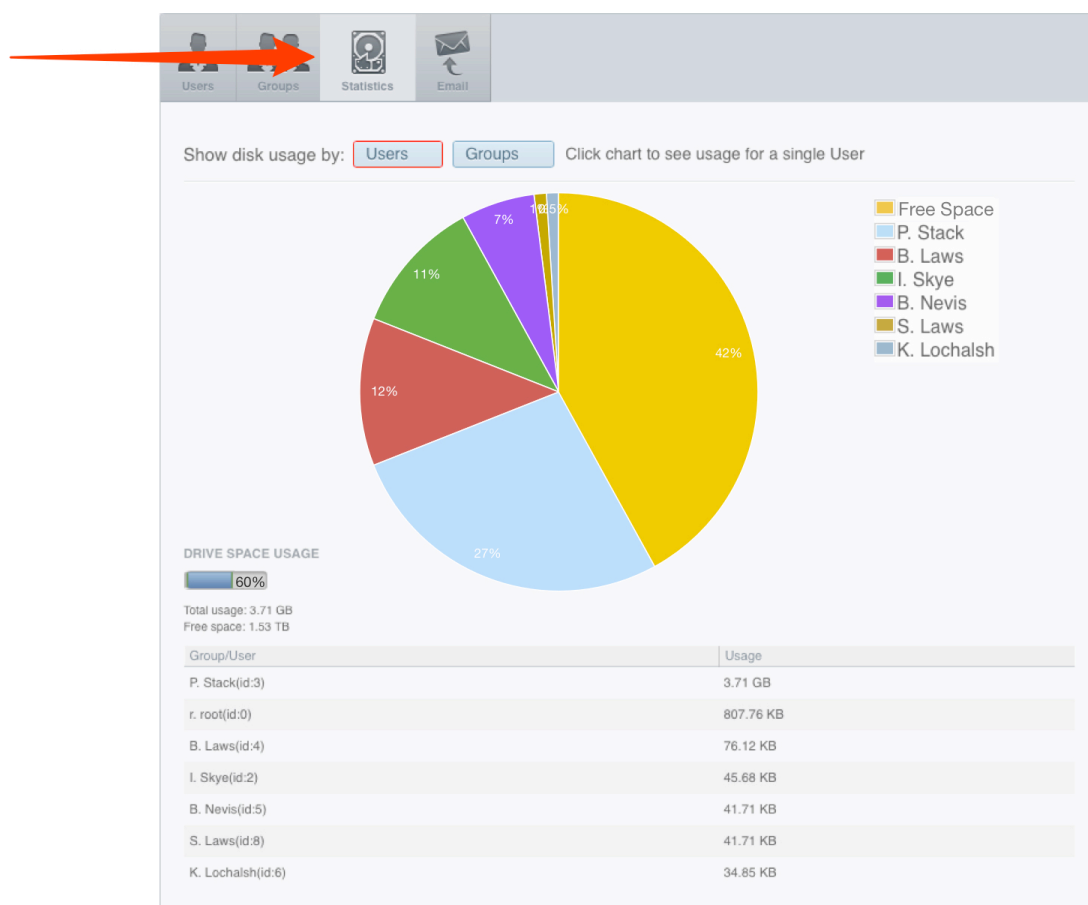
☐ Read-Only

☐ Read-Annotate

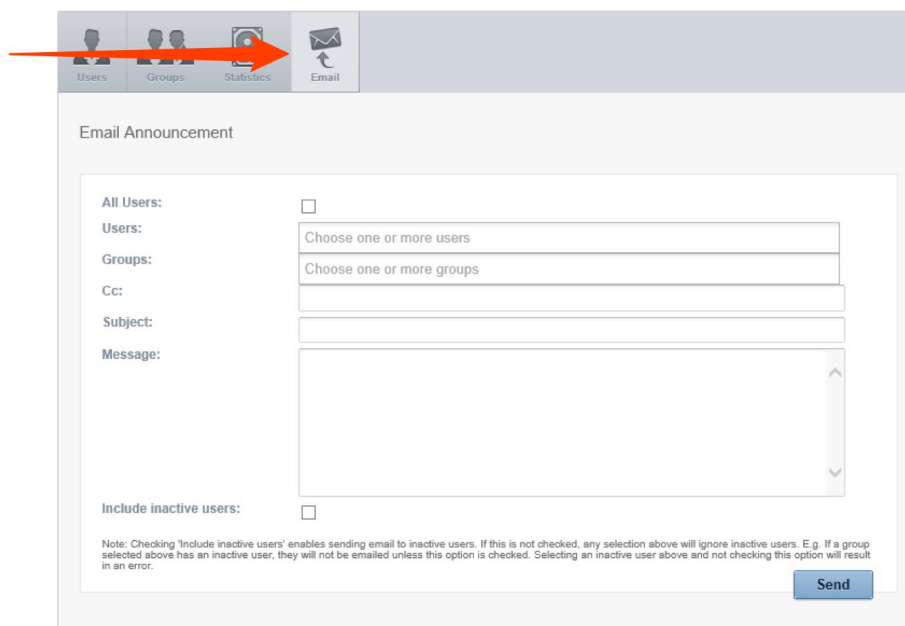
☐ Read-Write

Full details on various Permissions levels can be found on the OMERO Permissions page.

- 3 Click on the **Statistics** tab to see the disk usage for all users and groups on the OMERO server.



- 4 Click on the **Email** tab to send emails to OMERO users or groups.



Users Groups Statistics **Email**

Email Announcement

All Users: ☐

Users:

Groups:

Cc:

Subject:

Message:

Include inactive users: ☐

Note: Checking 'Include inactive users' enables sending email to inactive users. If this is not checked, any selection above will ignore inactive users. E.g. If a group selected above has an inactive user, they will not be emailed unless this option is checked. Selecting an inactive user above and not checking this option will result in an error.

Send